

### REMARKS

In accordance with the foregoing, claims 1, 6, 7, and 11 are amended. No new matter is being presented, and approval and entry of amended claims 1, 6, 7, and 11 are respectfully requested.

Claims 1-11 are pending and under consideration. Reconsideration is respectfully requested.

### ENTRY OF AMENDMENT UNDER 37 CFR §1.116

Applicant requests entry of this Rule 116 Response because it is believed that the amendment of claims 1, 6, 7, and 11 puts this application into condition for allowance and should not entail any further search by the Examiner since no new features are being added or no new issues are being raised. Claims 1, 6, and 7, all as amended, clarify, using claim 1 as an example, incoming wavelength means, outgoing wavelength means, and selection supervisory control channel setting means. (See, for example, FIGs. 6-7.) Claim 11 is amended to correct a typographical error and replace the identified parent claim from "1" to --11--.

### TRAVERSE

The Action rejects claims 1-11 under 35 U.S.C. §103(a) as being unpatentable over Barry (U.S. Patent No. 6,433,903) in view of combinations of Ogawa (U.S. Patent No. 6,256,126), Hirst (U.S. Patent No. 6,639,701), Choi (U.S. Patent No. 6,271,962), and Ishimatsu (U.S. Patent No. 6,018,406).

Independent claims 1 and 6, both as amended, respectively recite a communication system, and a WDM device, using claim 1 as an example, including "incoming wavelength selection means coupled to an input side of said WDM transmitting means for selecting a first wavelength to receive an incoming signal of the second supervisory channel, outgoing wavelength selection means coupled to an output side of said WDM transmitting means for selecting a second wavelength to transmit an outgoing signal of the second supervisory channel, and supervisory control channel setting means for variably setting the second supervisory control channel according to given setting information, including independent selection of the first and second wavelengths for the incoming and outgoing signals of the second supervisory channel."

Independent claim 7 recites a network managing device including "setting information indicating means for indicating, to a WDM device, setting information . . . including wavelength information that commands said WDM device to select a first wavelength for receiving an

incoming signal of the second supervisory channel, as well as to select a second wavelength, independently of said selection of the second wavelength, for transmitting an outgoing signal of the second supervisory channel."

Independent claim 8 recites a communication system including "setting information indicating means for setting supervisory control channels to said WDM device, the setting information including wavelength information that specifies which idle-band wavelength to select for use as the second optical supervisory channel at the supervisory control channel setting means." Independent claim 10 recites a method including "variably setting the supervisory control channels and selecting an idle-band wavelength for the second supervisory channel; wavelength-multiplexing and -demultiplexing the supervisory control channels and the main optical signals; indicating setting information setting the supervisory control channels and specifying which idle-band wavelength to select as the second optical supervisory channel."

Applicants submit that features recited by independent claims 1, 6, 7, 8, and 10 (and respective dependent claims) are not taught by the cited art, alone or in combination. For example, Applicant submits that none of the cited references, alone or in combination, teach independent selection of the first and second wavelengths for incoming and outgoing signals of a second supervisory channel.

As provided in MPEP §2143.03 "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F. 2d 1981, (CCPA 1974)."

Using claim 1, as amended, as an example, according to aspects of the present invention, a WDM device is disposed between two sections, e.g., WDM device 10-2 illustrated in FIG. 1. The device includes, for example, incoming wavelength selection means, e.g., optical switch 12a-1 illustrated in FIG. 4 or switches 121b to 124b illustrated in FIG. 6. The device also includes outgoing wavelength selection means, e.g., optical switch 12b-1 illustrated in FIG. 5 or switches 121e to 124e illustrated in FIG. 7.

For example, as illustrated in FIG. 1, a second supervisory channel is assigned a wavelength  $\lambda_5$  in section S1, but it is carried over a different wavelength  $\lambda_6$  in the next section S2. This is made possible by the feature of the WDM device that allows the input and output ends of the second supervisory channel to be configured independently of each other.

As recited by claim 1, for example, the incoming wavelength selection means, coupled to the input side of the WDM transmitting means, selects a first wavelength to receive an incoming signal of the second supervisory channel. The outgoing wavelength selection means, coupled

to the output side of the WDM transmitting means, selects a second wavelength to transmit an outgoing signal of the second supervisory channel. The supervisory control channel setting means variably sets the second supervisory control channel according to given setting information, including independent selection of the first and second wavelengths for the incoming and outgoing signals of the second supervisory channel.

That is, according to aspects of the present invention, the second supervisory channel can be conveyed physically with different optical wavelengths in different sections, while still being a single logical channel. None of the cited art, alone or in combination, teach this feature.

### Summary

Since features recited by independent claims 1, 6, 7, 8, and 10 (and respective dependent claims) are not taught by the cited art, alone or in combination, and *prima facie* obviousness is not established, the rejections should be withdrawn and claims 1-11 allowed.

### CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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